Scope of EPA’s Inspection of the Savannah River National Laboratory, Located at the Savannah River Site, Aiken, SC

Organizations Notified: Department of Energy – Carlsbad Field Office (CBFO)
New Mexico Environment Department

Inspection Dates: August 9 - 11, 2016

Inspection Schedule: Tuesday 8:00 am – Kick-off meeting
Tuesday 8:30 am – 4:30 pm, Conduct Inspection
Wednesday 8:00 am – 4:30 pm, Conduct Inspection
Thursday 8:00 am – 3:00 pm, Conduct Inspection
Thursday 4:00 pm – Close-out meeting

Inspection Team: Ed Felton, US EPA HQ
Patrick Kelly, EPA Contractor (SC&A)
Rose Gogliotti, EPA Contractor (SC&A)

Inspection Scope:
As part of transuranic (TRU) waste characterization performed prior to disposal of waste at the Waste Isolation Pilot Plant (WIPP), certain remote-handled (RH) TRU wastes require quantification of specific radionuclides using laboratory methods. The Savannah River National Laboratory (SRNL) is located at the Savannah River Site (SRS) and is scheduled to analyze some RH wastes from Idaho National Laboratory (INL) and other RH TRU generator sites. Before EPA can approve these RH TRU wastes, EPA will perform an inspection to determine if the analytical practices and the radiological data generated are adequate to support EPA’s approval of proposed RH Tier 1 changes based on the SRNL data.

The EPA Inspection Team will evaluate the radiometric and spectrometric laboratory operations implemented to assay RH TRU wastes. These evaluations will be in accordance with 40 CFR 194.8(b) and will assess the adequacy, implementation, and effectiveness of technical processes implemented by SRNL in support of characterizing waste intended for disposal at the WIPP.

Characterization Systems To Be Inspected:
From August 9-11, 2016, EPA will evaluate SRNL personnel, processes and equipment that are used to measure specific radionuclides in TRU wastes under EPA’s inspection authority described in 40 CFR 194.8(b). The EPA inspection includes evaluation of: personnel qualifications/training (by review of records and conducting interviews); laboratory chain of custody and sample control; quality assurance/quality control records; laboratory certification(s); records of the laboratory’s participation in third-party performance testing; radiometric and spectrometric instrument calibration, performance evaluations and control; pedigree of standard reference materials; data calculation and validation protocols; non-conformance procedures; sample preparation and radiochemical procedures; and records of method qualifications. The data generated by SRNL have been or will be used to quantify radionuclide contents of RH TRU wastes to support the development of radionuclide scaling factors for wastes intended for disposal at the WIPP repository near Carlsbad, NM.
Documents:
The EPA Inspection Team needs SRNL documents to prepare inspection checklists. While EPA Inspection Personnel have tried to identify all needed documents, the list below may not be comprehensive. Some documents have been provided previously and are in initial review. EPA appreciates SRNL providing all documents in a timely manner and requests that SRNL provide all documents for this inspection no later than July 15, 2016.

- Quality Assurance Manual
- L16.1-ADS-0124
- L16.1-ADS-0130
- L16.1, ADS-0132
- L16.1-ADS-1578
- L16.1-ADS-2402
- L16.1-ADS-2405
- L16.1-ADS-2407
- L16.1-ADS-2420
- L16.1-ADS-2424
- L16.1-ADS-2447
- L16.1-ADS-2449
- L16.1-ADS-2453
- SRNL-ACS-2007-00002
- SRNL-ADD-2007-00216
- SRNL-ST1-2012-00211
- SRNL-SCS-2008-0004
- ADS-W100023
- SRNL-ADD-2007-00584
- SRNL-L4000-2010-00031

EPA may request additional information upon the review of those listed above prior to and/or during the SRNL inspection. Based on EPA’s limited review to date, there may be additional procedures, laboratory notebooks or other types of records that will be requested on the first day of the inspection.

Pre-Inspection Conference Call:
EPA requests a conference call with SRNL personnel during the week of July 25th at a mutually convenient time to be coordinated through CBFO.

Inspection Logistics:
A week before the inspection, EPA requests that CBFO/SRNL provide the location to be used for the inspection opening and closing meetings. EPA also requests that SRNL provide office space for the EPA Inspection Team members to conduct interviews and review documents. The inspection logistics are as follows:
• The EPA Inspection Team Leader will conduct an opening meeting for the inspection with the appropriate personnel from CBFO, SRNL, SRS-CCP and their support contractors at 8:00 am on August 9, 2016.

• The EPA Inspection Team members will conduct the inspection from 8:00 am to 4:30 pm on Tuesday August 9 (following the opening meeting) and Wednesday, August 10, 2016.

• The EPA Inspection Team members will stop inspecting at 3:00 pm on Thursday, August 11, 2016.

• An inspection close-out meeting will be held Thursday, August 11, 2016 at 4:00 pm.

Please note that all dates and times listed above may be adjusted to accommodate personnel availability, logistical considerations or the inspection’s progress, as required. If the EPA Inspection Team is able to complete all inspection elements earlier than indicated above, the timing of the close-out meeting may change. CBFO QA is welcome to provide observers for the EPA inspection.